

REMARKS

Applicant respectfully traverses and requests reconsideration.

Applicant wishes to thank the Examiner for the withdrawal of the previous rejection.

Claims 1-3 and 6-23 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,761,698 (Combs). Combs is directed to a computer system having an audio/video/CD drive controller coprocessor 32 that has an integral system memory interface. The coprocessor 32 includes a graphics coprocessor, digital signal processor (audio processor), compact disc controller and video controller. As described in Combs, the audio/video/CD controller/coprocessor 32 is coupled to a central processing unit 30 via system bus 31. System memory 34 is connected to the audio/video/CD controller/coprocessor 32 via a system bus 61. As such, system memory bus 61 is a system memory bus. (See for example, column 12, lines 25-26). The system memory bus 61 connects the various devices to the system memory 34. The coprocessor 32 includes an arbitrator to arbitrate access to the system memory 34 between six possible bus masters including the CPU, video controller and CD drive controller. As such, the coprocessor 32 described in Combs arbitrates between the various system memory users and system memory 34. The arbitrator controls the changing of the priorities of the devices in the coprocessor 32 and CPU to access system memory and the CPU has the lowest priority of all bus masters until an interrupt occurs. (See for example column 5, lines 25-42). The coprocessor 32 is the arbitrator for the system memory 34. (See column 5, lines 45-47). The arbitrator in combs arbitrates among system memory user to grant access to system memory 34 -- it does not interpret incoming data from a system bus via a local bus to provide incoming data to either an audio processing circuit and a graphics processing circuit. Applicants claim a different structure and operation.

For example, referring to FIG. 1, amended claim 1 is directed to a video graphics and audio processing circuit that includes a local bus that is operative to receive incoming data from a system bus and that is coupled to transceive data to and from the graphics processing circuit and the audio processing circuit. A bus arbitrator, such as non-system memory bus arbitrator, is coupled to the local bus, the graphics processing circuit and the audio processing circuit and interprets incoming data obtained from the system bus and provides the incoming data to either the audio graphics processing circuit or the video graphics processing circuit and also arbitrates outputting of data on the local bus from either the graphics processing circuit and the audio processing circuit. In contrast, as described in Combs, the arbitrator in coprocessor 32 of Combs does not interpret incoming data from the system bus, but instead arbitrates use of the system memory via system memory bus 61. Also, the Office Action cites column 12, lines 25-35 of Combs. However, Applicants respectfully submit that this cited portion does not teach the claimed subject matter.

The cited portion refers to allocating bus masters with the system memory 34 via system memory bus 61. The arbitrator in Combs does not interpret incoming data from the system bus 31 for the video blitter 70 and the DSP 74. To the contrary, the video blitter 70 and the DSP 74 appear to get their data from "other circuitry 38". As described by Combs in column 7, lines 48-56, the additional circuitry 38 includes a video digital to analog converter, a television encoder, an audio analog to digital converter or digital to analog converter or compressor such an audio codec. As such, the audio input information does not come from the internal arbitrator or the system memory bus 61 for the audio processing circuit. Likewise, the incoming data from system bus 31 also does not appear to be passed to the video graphics processing circuit (alleged to be blitter 70) via the system bus 31 or arbitrator in Combs. Accordingly, the Combs reference

does not teach the claimed subject matter. Instead, it appears that Combs teaches that the coprocessor 32 utilizes a memory bus arbitrator to arbitrate access to the system memory 34. If the rejection is maintained, Applicant respectfully requests a showing as to where the Combs reference teaches the claimed subject matter.

As to Claim 2, the claim requires, among other things, that the bus arbitrator that interprets incoming data from the system bus to route data to the audio processing circuit when an address identifies the audio processing circuit, and routes received data to the graphics processing circuit when the address identifies the graphic processing circuit. The Office Action cites column 18, lines 44-56 of Combs as allegedly teaching this operation. However, the cited portion of Combs does not teach routing as claimed and merely indicates that a video memory controller 67 in Combs decodes address ranges into a memory map so that each of the components is allocated memory. There is no discussion of any arbitrator routing received data that is received from the system bus to an audio processing circuit based on an address, or routing incoming data from a system bus to the graphics processing circuit from the local bus. Accordingly, the claim is in condition for allowance.

As to claim 3, Applicant respectfully reasserts the relevant remarks made above with respect to claim 2.

Claims 6-23 are rejected under similar grounds as to claims 1-3 and as such, Applicant respectfully reasserts the relevant remarks made above and asserts these claims are also in condition for allowance.

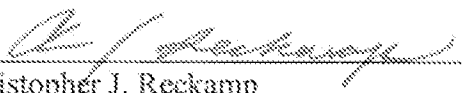
Claims 4 and 5 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Combs in view of U.S. Patent No. 6,546,426 (Post). Applicant respectfully reasserts the relevant remarks made above with respect to claim 3 and as such, these claims are also in condition for

allowance. In addition, claim 4 requires, for example, that the bus arbitrator comprises an output data switch to output data to the bus from the audio processing circuit or the graphics processing circuit based on output control data. It is admitted that Combs does not disclose such an output switch. This admission also supports Applicant's previous statements above since Combs' arbitrator in coprocessor 32 is for a different purpose and different bus operation from that claimed. In addition, since Combs' arbitrator does not operate as claimed, the combination with Post also does not render the claims obvious since the resulting system would not include an arbitrator configured as claimed. These claims are also in condition for allowance for other reasons as recognized by those of ordinary skill in the art.

Applicant respectfully submits that the claims are in condition for allowance and respectfully requests that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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